

No.

200000003

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Holden's Foundation Seeds L. L. C.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN, FIELD

'LH267'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of January, in the year two thousand two.

Attest:

Paul M. Zahrad

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Burt G. Gorman

Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
HOLDEN'S FOUNDATION SEEDS L.L.C.		Ex4363	LH267
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)		5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY PVP NUMBER 200000000
503 S. MAPLEWOOD AVENUE PO BOX 839 WILLIAMSBURG, IA 52361		(319)668-1100	
		6. FAX (include area code)	FILING DATE
		(319)668-2453	10/4/1999
7. GENUS AND SPECIES NAME	8. FAMILY NAME (Botanical)		FILING AND EXAMINATION FEE
ZEA MAYS	GRAMINEAE		\$ 2450.00
9. CROP KIND NAME (Common name)			DATE
CORN, FIELD			10-499
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name)			CERTIFICATION FEE:
LIMITED LIABILITY COMPANY			\$ 320.00
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		12. DATE OF INCORPORATION	DATE
		DECEMBER 1, 1997	1/22/02
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS			14. TELEPHONE (include area code)
MR. MARK ARMSTRONG HOLDEN'S FOUNDATION SEEDS L.L.C. 503 S. MAPLEWOOD AVENUE PO BOX 839 WILLIAMSBURG, IA 52361			(319)668-1100
			15. FAX (include area code)
			(319)668-2453
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)			
<input type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input checked="" type="checkbox"/> NO (If "no," go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?	
<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?			
<input type="checkbox"/> YES (If "yes," give names of countries and dates) <input checked="" type="checkbox"/> NO			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.			
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.			
Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s))		SIGNATURE OF APPLICANT (Owner(s))	
			
NAME (Please print or type)		NAME (Please print or type)	
GARY ARTHUR			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
PRESIDENT	9/20/99		

## Origin and Breeding History of the Inbred

### Exhibit

LH267 was initiated from the single cross of LH213 x LH217. This single cross was then crossed with LH210. This combination, LH210)(LH213 x LH217 was then selfed and the pedigree system of plant breeding was used in the development of LH267. Yield, stalk quality, root quality, disease tolerance, late plant greenness, late plant intactness, ear retention, pollen shedding ability, silking ability and corn borer tolerance were the criteria used to determine the rows from which ears were selected during the development of LH267.

LH210, LH213 and LH217 the progenitors of LH267, are all proprietary field corn inbred lines of Holden's Foundation Seeds, L.L.C., of Williamsburg, Iowa. In 1990, Holden's Foundation Seeds, L.L.C., applied for plant variety protection of LH210. On May 31, 1991, LH210 was awarded certificate #9000050. LH213 is also protected by a utility patent from the United States Patent Office. The utility patent was issued on January 4, 1994, and is patent #5,276,262. In 1991, Holden's also applied for plant variety protection of LH213. On September 15, 1992, LH213 was awarded certificate #9100071. LH213 is also protected by a utility patent from the United States Patent Office. The utility patent was issued on January 4, 1994, and is patent #5,276,259. In 1992, Holden's Foundation Seeds L.L.C., applied for plant variety protection of LH217. On May 29, 1992, LH217 was awarded certificate #9300036. LH217 is also protected by a utility patent from the United States Patent Office. The utility patent was issued on April 19, 1994, and is patent #5,304,727.

Also enclosed is a copy of a letter from the USDA Seed Branch confirming that no other field corn inbreds have been named, 'LH267'.

On the following pages are a summary and description of the development of LH267. Also included are copies of pages from Holden's Foundation Seeds, L.L.C. nursery books. The rows associated with the development of LH267 have been highlighted.

LH267 has shown uniformity and stability for all traits described in Exhibit C. It has been self-pollinated and ear-rowed a sufficient number of generations, with careful attention to uniformity of plant type to ensure homozygosity and phenotypic stability. The line has been increased both by hand (Iowa 1996 and 1997; Hawaii 1998) and sibbed in an isolated production field (Iowa 1998) with continued observations for uniformity and stability. Gary D. Arthur and Lance Veldboom, PhD., the originating plant breeders, have observed LH267 all three generations it has been increased. The line is uniform, stable and no variant traits have been observed or are anticipated in LH267.

Origin and Breeding History of the Inbred  
LH267 = Ex4363 = LH210)(LH213 x LH217

<u>Field/Row</u>	<u>Pedigree</u>	<u>Location</u>	<u>Year</u>
East Dasenbrock	LH267	Iowa	1998
32878-32892 32979-32993	Ex4363	Hawaii	1998
38349-38358	Ex4363	Iowa	1997
25787	LH210)(LH213 x LH217 @7	Iowa	1996
23824	LH210)(LH213 x LH217 @6	Hawaii	1996
41813	LH210)(LH213 x LH217 @5	Iowa	1995
15078	LH210)(LH213 x LH217 @4	Hawaii	1995
9	LH210)(LH213 x LH217 @3	Indiana	1994
5520	LH210)(LH213 x LH217 @2	Hawaii	1994
7168	LH210)(LH213 x LH217 @1	Indiana	1993
32497	LH210)(LH213 x LH217	Hawaii	1993
42606 42604	LH210 LH213 x LH217	Iowa	1992
34823 34821	LH213 LH217	Hawaii	1992

## Novelty Statement

## Exhibit B

LH267 is most similar to LH217. However, the most distinguishing difference is silk color. The silk color of LH267 is pink while the silk color of LH217 is light green. When using the Munsell Color Charts for Plant Tissues as a reference, the silk color of LH267 would be classified as 5R 5/4 while the silk color of LH217 would be classified as 2.5GY 8/6.



United States Department of Agriculture, Agricultural Marketing Service  
Science Division, Plant Variety Protection Office  
National Agricultural Library Building, Room 500  
Beltsville, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY  
CORN (*Zea mays* L.)

Name of Applicant(s) <b>Holden's Foundation Seeds, LLC</b>		Variety Seed Source <b>Iowa 1997</b>	Variety Name or Temporary Designation <b>LH267</b>																																										
Address (Street & No., or R.F.D. No., City, State, Zip Code and Country) <b>503 South Maplewood Ave PO Box 839 Williamsburg, IA 52361</b>		<div style="border: 1px solid black; padding: 2px;">FOR OFFICIAL USE</div> PVPO Number																																											
Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description. Traits designated by a '*' are considered necessary for an adequate variety description and must be completed.																																													
COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe #25 and #26 in Comments section): <table style="width:100%; font-size: small;"> <tr> <td>01=Light Green</td> <td>06=Pale Yellow</td> <td>11=Pink</td> <td>16=Pale Purple</td> <td>21=Buff</td> </tr> <tr> <td>02=Medium Green</td> <td>07=Yellow</td> <td>12=Light Red</td> <td>17=Purple</td> <td>22=Tan</td> </tr> <tr> <td>03=Dark Green</td> <td>08=Yellow-Orange</td> <td>13=Cherry Red</td> <td>18=Colorless</td> <td>23=Brown</td> </tr> <tr> <td>04=Very Dark Green</td> <td>09=Salmon</td> <td>14=Red</td> <td>19=White</td> <td>24=Bronze</td> </tr> <tr> <td>05=Green-Yellow</td> <td>10=Pink-Orange</td> <td>15=Red &amp; White</td> <td>20=White Capped</td> <td>25=Variegated (Describe)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>26=Other (Describe)</td> </tr> </table>				01=Light Green	06=Pale Yellow	11=Pink	16=Pale Purple	21=Buff	02=Medium Green	07=Yellow	12=Light Red	17=Purple	22=Tan	03=Dark Green	08=Yellow-Orange	13=Cherry Red	18=Colorless	23=Brown	04=Very Dark Green	09=Salmon	14=Red	19=White	24=Bronze	05=Green-Yellow	10=Pink-Orange	15=Red & White	20=White Capped	25=Variegated (Describe)					26=Other (Describe)												
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2. REGION WHERE DEVELOPED IN THE U.S.A.:  * <u>5</u> 1=Northwest 2=Northcentral 3=Northeast 4=Southeast 5=Southcentral 6=Southwest 7=Other		Standard Seed Source <u>Iowa State Univ.</u> <u>5</u>																																											
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Application Variety Data			Page 2			Standard Inbred Data		
5. LEAF:			Standard Deviation	Sample Size	Standard Deviation			Sample Size
*	<u>8.5</u> cm Width of Ear Node Leaf	<u>.81</u>	<u>50</u>	<u>9.2</u>	<u>.91</u>	<u>50</u>		
*	<u>8.5</u> cm Length of Ear Node Leaf	<u>4.24</u>	<u>50</u>	<u>7.2.3</u>	<u>3.43</u>	<u>50</u>		
*	<u>6</u> Number of leaves above top ear	<u>.61</u>	<u>50</u>	<u>5</u>	<u>.31</u>	<u>50</u>		
	<u>2.4</u> degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to stalk above leaf)	<u>5.27</u>	<u>50</u>	<u>3.9</u>	<u>9.67</u>	<u>50</u>		
*	<u>0.2</u> Leaf Color (Munsell code <u>5GY 4/4</u> )			<u>0.2</u> (Munsell code <u>7.5GY 3/4</u> )				
	<u>6</u> Leaf Sheath Pubescence (Rate on scale from 1=none to 9=like peach fuzz)			<u>2</u>				
	<u>6</u> Marginal Waves (Rate on scale from 1=none to 9=many)			<u>4</u>				
	<u>7</u> Longitudinal Creases (Rate on scale from 1=none to 9=many)			<u>3</u>				
6. TASSEL:			Standard Deviation	Sample Size	Standard Deviation			Sample Size
*	<u>8</u> Number of Primary Lateral Branches	<u>1.51</u>	<u>50</u>	<u>7</u>	<u>.90</u>	<u>50</u>		
	<u>3.3</u> Branch Angle from Central Spike	<u>9.97</u>	<u>50</u>	<u>4.9</u>	<u>9.27</u>	<u>50</u>		
*	<u>3.8.8</u> cm Tassel Length (from top leaf collar to tassel tip)	<u>2.86</u>	<u>50</u>	<u>4.8.3</u>	<u>2.98</u>	<u>50</u>		
	<u>7</u> Pollen Shed (Rate on scale from 0=male sterile to 9=heavy shed)			<u>7</u>				
	<u>0.7</u> Anther Color (Munsell code <u>2.5GY 8/4</u> )			<u>0.7</u> (Munsell code <u>2.5GY 8/6</u> )				
	<u>0.2</u> Glume Color (Munsell code <u>5GY 5/6</u> )			<u>0.2</u> (Munsell code <u>5GY 5/6</u> )				
	<u>1</u> Bar Glumes (Glume Bands): 1=Absent 2=Present			<u>1</u>				
7a. EAR (Unhusked Data):					26 Olive Green <del>0.9</del> (Munsell code <u>5Y 7/4</u> )			
*	<u>1.1</u> Silk Color (3 days after emergence) (Munsell code <u>5R 5/4</u> )			<u>0.1</u> (Munsell code <u>2.5GY 7/6</u> )				
	<u>0.2</u> Fresh Husk Color (25 days after 50% silking) (Munsell code <u>5GY 6/6</u> )			<u>2.1</u> (Munsell code <u>7.5YR 7/4</u> )				
	<u>2.1</u> Dry Husk Color (65 days after 50% Silking) (Munsell code <u>7.5YR 7/4</u> )			<u>1</u>				
*	<u>1</u> Position of Ear at Dry Husk Stage: 1=Upright 2=Horizontal 3=Pendent			<u>5</u>				
	<u>5</u> Husk Tightness (Rate on scale from 1=very loose to 9=very tight)			<u>2</u>				
	<u>2</u> Husk Extension (at harvest): 1=Short (ears exposed) 2=Medium (<8 cm) 3=Long (8-10 cm beyond ear tip) 4=Very Long (>10 cm)							
7b. EAR (Husked Ear Data):			Standard Deviation	Sample Size	Standard Deviation			Sample Size
*	<u>1.7.8</u> cm Ear Length	<u>1.44</u>	<u>50</u>	<u>2.0.1</u>	<u>1.31</u>	<u>50</u>		
*	<u>3.7.7</u> mm Ear Diameter at mid-point	<u>1.40</u>	<u>50</u>	<u>3.7.9</u>	<u>2.20</u>	<u>50</u>		
	<u>8.8.4</u> gm Ear Weight	<u>36.44</u>	<u>50</u>	<u>1.0.8.5</u>	<u>21.79</u>	<u>50</u>		
*	<u>1.2</u> Number of Kernel Rows	<u>1.51</u>	<u>50</u>	<u>1.1</u>	<u>1.01</u>	<u>50</u>		
	<u>2</u> Kernel Rows: 1=Indistinct 2=Distinct			<u>2</u>				
	<u>2</u> Row Alignment: 1=Straight 2=Slightly Curved 3=Spiral			<u>1</u>				
	<u>1.1.6</u> cm Shank Length	<u>1.90</u>	<u>50</u>	<u>1.3.2</u>	<u>3.36</u>	<u>50</u>		
	<u>2</u> Ear Taper: 1=Slight 2=Average 3=Extreme			<u>2</u>				
Application Variety Data						Standard Inbred Data		

Note: Use chart on first page to choose color codes for color traits.

6

## 8. KERNEL (Dried):

Standard Deviation

Sample Size

1 0.8 mm Kernel Length

.40

50

8.4 mm Kernel Width

.60

50

5.1 mm Kernel Thickness

.40

50

4 7.7 % Round Kernels (Shape Grade)

2.61

15

1 Aleurone Color Pattern: 1=Homozygous 2=Segregating

(\*) 1 9 Aleurone Color (Munsell code 2.5Y 8/2)

\* 0 8 Hard Endosperm Color (Munsell code 2.5Y 8/8)

\* 0 3 Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (sh2) 3=Normal Starch  
4=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine  
8=Super Sweet (se) 9=High Oil 10=Other

2 6.3 gm Weight per 100 Kernels (unsized sample)

.60

15

## 9. COB:

Standard Deviation

Sample Size

\* 26.8 mm Cob Diameter at mid-point

1.70

50

1 4 Cob Color (Munsell code 10R 3/4)

Standard Deviation

Sample Size

2 6.3

1.60

50

1 4 (Munsell code 10R 5/6)

## 10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant):

leave blank if not tested; leave Race or Strain Options blank if polygenic):

## A. Leaf Blights, Wilts, and Local Infection Diseases

— Anthracnose Leaf Blight (*Colletotrichum graminicola*)— Common Rust (*Puccinia sorghi*)— Common Smut (*Ustilago maydis*)7 Eyespot (*Kabatiella zeae*)— Goss's Wilt (*Clavibacter michiganense* spp. *nebraskense*)5 Gray Leaf Spot (*Cercospora zeae-maydis*)8 Helminthosporium Leaf Spot (*Bipolaris zeicola*) Race 3— Northern Leaf Blight (*Exserohilum turcicum*) Race2 Southern Leaf Blight (*Bipolaris maydis*) Race 0— Southern Rust (*Puccinia polysora*)— Stewart's Wilt (*Erwinia stewartii*)

— Other (Specify)

## B. Systemic Diseases

— Corn Lethal Necrosis (MCMV and MDMV)

— Head Smut (*Sphacelotheca reiliana*)

— Maize Chlorotic Dwarf Virus (MCDV)

— Maize Chlorotic Mottle Virus (MCMV)

— Maize Dwarf Mosaic Virus (MDMV) Strain

— Sorghum Downy Mildew of Corn (*Peronosclerospora sorghi*)

— Other (Specify)

## C. Stalk Rots

— Anthracnose Stalk Rot (*Colletotrichum graminicola*)— Diplodia Stalk Rot (*Stenocarpella maydis*)— Fusarium Stalk Rot (*Fusarium moniliforme*)— Gibberella Stalk Rot (*Gibberella zeae*)

— Other (Specify)

## D. Ear and Kernel Rots

— Aspergillus Ear and Kernel Rot (*Aspergillus flavus*)— Diplodia Ear Rot (*Stenocarpella maydis*)— Fusarium Ear and Kernel Rot (*Fusarium moniliforme*)— Gibberella Ear Rot (*Gibberella zeae*)

— Other (Specify)



11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant);  
leave blank if not tested):

2 0 0 0 0 0 0 0 3

	Standard Deviation	Sample Size		Standard Deviation	Sample Size
— Banks Grass Mite ( <i>Oligonychus pratensis</i> )			—		
— Corn Earworm ( <i>Helicoverpa zea</i> )			—		
— Leaf-Feeding			—		
— Silk Feeding :			—		
— mg larval wt.			—		
— Ear Damage			—		
— Corn Leaf Aphid ( <i>Rhopalosiphum maidis</i> )			—		
— Corn Sap Beetle ( <i>Carpophilus dimidiatus</i> )			—		
— European Corn Borer ( <i>Ostrinia nubilalis</i> )			—		
— 1st Generation (Typically Whorl Leaf Feeding)			—		
— 2nd Generation (Typically Leaf Sheath-Collar Feeding)			—		
— Stalk Tunneling :			—		
— cm tunneled/plant			—		
— Fall Armyworm ( <i>Spodoptera frugiperda</i> )			—		
— Leaf-Feeding			—		
— Silk-Feeding :			—		
— mg larval wt.			—		
— Maize Weevil ( <i>Sitophilus zeamaze</i> )			—		
— Northern Rootworm ( <i>Diabrotica barberi</i> )			—		
— Southern Rootworm ( <i>Diabrotica undecimpunctata</i> )			—		
— Southwestern Corn Borer ( <i>Diatraea grandiosella</i> )			—		
— Leaf Feeding			—		
— Stalk Tunneling :			—		
— cm tunneled/plant			—		
— Two-spotted Spider Mite ( <i>Tetranychus urticae</i> )			—		
— Western Rootworm ( <i>Diabrotica virgifera virgifera</i> )			—		
— Other (Specify)			—		

## 12. AGRONOMIC TRAITS:

<u>5</u> Stay Green (at 65 days after anthesis) (Rate on a scale from 1=worst to 9=excellent.)	<u>5</u>
— <u>0.0</u> % Dropped Ears (at 65 days after anthesis)	— <u>0.0</u>
— <u>0.0</u> % Pre-anthesis Brittle Snapping	— <u>0.0</u>
— <u>0.0</u> % Pre-anthesis Root Lodging	— <u>0.0</u>
— <u>0.0</u> % Post-anthesis Root Lodging (at 65 days after anthesis)	— <u>0.0</u>
— <u>    </u> Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)	— <u>    </u>

## 13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied)

0 Isozymes    0 RFLP's    0 RAPD's

## REFERENCES:

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 Farr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Plant and Plant Products in the United States. The American Phytopathological Society, St. Paul, MN.  
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 Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improvement, Third Edition. Agronomy Monograph 18. ASA, CSSA, SSSA, Madison, WI.  
 Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959.  
 U.S. Department of Agriculture. 1936, 1937. Yearbook.

COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):

$$GDD = \frac{T_{max} + T_{min}}{2} - 50^{\circ}F$$

$$T_{max} \leq 86^{\circ}F$$

$$T_{min} \geq 50^{\circ}F$$

Standard Seed Source: Iowa State University Data Collected at Williamsburg, IA 1998

## Additional Description of the Inbred

## Exhibit D

LH267 is a medium season field corn inbred line that flowers one day earlier than LH212Ht. It appears to be an excellent pollinator.

LH267 contributes uniform ear size, excellent late season plant intactness, good staygreen, and good stalk and root strength to its hybrids. Hybrids containing LH267 tend to be tall with lower ear placement and appear to take stress well. LH267 hybrids are probably best adapted to the central and southern corn belt.

*Notes from Exhibit C:*

The main silk body of Mo17 is green, but as the silk hairs are exposed to sunlight they turn lighter and are more 'olive green' in color. Please change the verbal silk color of Mo17 from '9' (salmon) to '26' with the description being 'olive green'. On occasion, it is difficult for me to describe what I observe in the field and match it to a color chip in the book. I'm sometimes puzzled with what I observe and the resulting color match and this is one of those times.

After some thought and evaluation, I have concluded that the reason for the large standard deviations in my statistical analysis is poor experimental design. I neglected to take into account the effect the end plants in the row have in my analysis. One to sometimes four plants at the end of each row have a dramatic effect on the standard deviation of the individual plants being evaluated. My understanding of this effect on this statistical function and its contribution to variance components was poor. To correct this flaw in my analysis, I will not allow my technician to measure these end plants. I will also more closely monitor the growth and uniformity of the individual plants in the row being evaluated.

JMS 11/20/01

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

**EXHIBIT E  
STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S)  HOLDEN'S FOUNDATION SEEDS L.L.C.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  Ex4363	3. VARIETY NAME  LH267
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 503 S. MAPLEWOOD AVENUE PO BOX 839 WILLIAMSBURG, IA 52361	5. TELEPHONE (include area code) (319)668-1100	6. FAX (include area code) (319)668-2453
7. PVPO NUMBER 2000000003		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? ☒ YES ☐ NO  
If no, give name of country \_\_\_\_\_

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO If no, give name of country \_\_\_\_\_

b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country \_\_\_\_\_

11. Additional explanation on ownership (If needed, use reverse for extra space):

**PLEASE NOTE:**

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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